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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

THE APPLICATION OF:

REBECCA E. CAHOON ET. AL.

CASE NO.: BB1295USCNT

APPLICATION NO.: 10/690994

CONFIRMATION NO.:

GROUP ART UNIT: 1638

EXAMINER: UNKNOWN

FILED: OCTOBER 21, 2003

FOR: PLANT DIACYLGLYCEROL ACYLTRANSFERASES

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents
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Sir:

In compliance with 37 CFR 1.97 and 1.98, Applicants bring to the attention of the U.S. Patent and Trademark Office information listed on the enclosed PTO/SB/08 and PTO-892 forms.

Benefit of the earlier filing date of U.S. Patent Application No. 09/856,018, filed May 16, 2001 is claimed under 35 U.S.C. 120 for the above-referenced application and only copies of information not previously made of record in the parent are enclosed.

Should any fee be required in connection with the filing of this Information Disclosure Statement, please charge such fee to Deposit Account No. 04-1928 (E. I. du Pont de Nemours and Company).

Respectfully submitted,

EMIL M. OROZCO, JR.
AGENT FOR APPLICANTS
Registration No.: 50,823
Telephone: (302) 695-3121
Facsimile: (302) 695-3125

Dated: July 20, 2004

Enclosures

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of

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Application Number

10/690994

Filing Date

October 21, 2003

First Named Inventor

Edgar B. Cahoon et al.

Group Art Unit

Unknown

Examiner Name

Unknown

Attorney Docket Number

BB1295 USCNT

U.S. PATENT DOCUMENTS

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FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ₆
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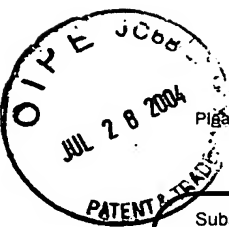
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Application Number	10/690994
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First Named Inventor	Edgar B. Cahoon et al.
Group Art Unit	Unknown
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Attorney Docket Number	BB1295 USCNT

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS

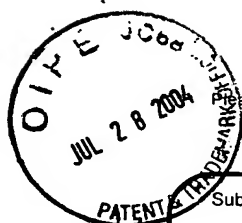
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		EMBL SEQUENCE DATABASE LIBRARY ACCESSION NO: AC0064579, 08-01-1998, ROUNSLEY, S.D. ET AL., Putative Acyl-CoA: Cholesterol Acyltransferase	
		PETER OELKERS ET AL., J. Biol. Chem., vol. 273(41):26765-26771, 1998, Characterization of Two Human Genes Encoding Acyl Coenzyme A: Cholesterol Acyltransferase-related Enzymes	
		EMBL SEQUENCE DATABASE LIBRARY ACCESSION NO: AC005917, X. LIN ET AL., 11-04-1998, Sequence and analysis of chromosome II of Arabidopsis thaliana	
		EMBL SEQUENCE DATABASE LIBRARY ACCESSION NO: AC003058, S.D. ROUNSLEY ET AL., 11-18-1997, Sequence and analysis of chromosome II of Arabidopsis thaliana	
		RANDALL J. WESELAKE ET AL., J. Exp. Bot., vol. 49(318):33-39, 1998, Triacylglycerol biosynthesis and gene expression in microspore-derived cell suspension cultures of oilseed rape	
		DAWN LITTLE ET AL., Biochem. J., vol. 304:951-958, 1994, Solubilization and characterization of diacylglycerol acyltransferase from microspore-derived cultures of oilseed rape	
		FERMIN PACHECO-MOISES ET AL., Plant Physiol., vol. 114:1095-1101, 1997, Regulation of Acyltransferase Activity in Immature Maize Embryos by Absciscic Acid and the Osmotic Environment	
		SYLVAIN CASES ET AL., Proc. Natl. Acad. Sci., vol. 95:13018-13023, 10/1998, Identification of a gene encoding an acyl CoA:diacylglycerol acyltransferase, a key enzyme in triacylglycerol synthesis	
		MARGRIT FRENTZEN, Fett-Lipid, vol. 100:161-166, 1998, Acyltransferases from basic science to modified seed oils	
		KEN'ICHI ICHIHARA ET AL., Biochimica et Biophysica Acta, vol. 958:125-129, 1988, Diacylglycerol acyltransferase in maturing safflower seeds: its influences on the fatty acid composition of triacylglycerol	
		CORY L. NYKIFORUK ET AL., Plant Physiol., vol. 121(3):1053, 1999, Isolation and characterization of a cDNA encoding a second putative diacylglycerol acyltransferase from a Microspore-Derived cell suspension culture of Brassica napus L. cv Jet Neuf (ACCESSION NO. AF164434) (PGR 99-158)	

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Group Art Unit	Unknown
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OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS

Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
		DOUGLAS H. HOBBS ET AL., FEBS Letters., vol. 452:145-149, 1999, Cloning of a cDNA encoding diacylglycerol acyltransferase from Arabidopsis thaliana and its functional expression	
		EMBL SEQUENCE DATABASE LIBRARY ACCESSION NO: Q9XGR5, 11-01-1999, C.L. NYKIFORUK ET AL., A cDNA exhibiting high homology to diacylglycerol acyltransferase (DGAT) in a microspore-derived cell suspension culture from Brassica napus cv. Jet Neuf	
		EMBL SEQUENCE DATABASE LIBRARY ACCESSION NO: Q9S7F2, 05-01-2000, J. ZOU ET AL., The Arabidopsis thaliana TAG1 gene encodes for a diacylglycerol acyltransferase	
		EMBL SEQUENCE DATABASE LIBRARY ACCESSION NO: AJ238008, 06-18-1999, J. ZOU ET AL., The Arabidopsis thaliana TAG1 gene encodes for a diacylglycerol acyltransferase	
		NATIONAL CENTER FOR BIOTECHNOLOGY INFORMATION GENERAL IDENTIFIER NO. 3135275, 05-16-1998, ROUNSLEY, S.D. ET AL., Arabidopsis thaliana chromosome II BAC F27F23 genomic sequence	
		NATIONAL CENTER FOR BIOTECHNOLOGY INFORMATION GENERAL IDENTIFIER NO. 3135276, 05-16-1998, ROUNSLEY, S.D. ET AL., Arabidopsis thaliana chromosome II BAC F27F23 genomic sequence	
		NATIONAL CENTER FOR BIOTECHNOLOGY INFORMATION GENERAL IDENTIFIER NO. 3746533, 10-15-1998, P. OELKERS ET AL., Characterization of two human genes encoding acyl coenzyme A: cholesterol acyltransferase-related enzymes	
		NATIONAL CENTER FOR BIOTECHNOLOGY INFORMATION GENERAL IDENTIFIER NO. 3859934, 11-11-1998, S. CASES ET AL., Identification of a gene encoding an acyl CoA:diacylglycerol acyltransferase, a key enzyme in triacylglycerol synthesis	
		NATIONAL CENTER FOR BIOTECHNOLOGY INFORMATION GENERAL IDENTIFIER NO. 5050913, 06-10-1999, D.H. HOBBS ET AL., Cloning of a cDNA encoding diacylglycerol acyltransferase from Arabidopsis thaliana and its functional expression	
		NATIONAL CENTER FOR BIOTECHNOLOGY INFORMATION GENERAL IDENTIFIER NO. 5579408, 11-30-1999, C. L. NYKIFORUK ET AL., Isolation and characterization of a cDNA encoding a second putative diacylglycerol acyltransferase from a Microspore-derived cell suspension culture of Brassica napus L.	
		JOSEPH J. KIEBER ET AL., Cell, vol. 72:427-441, 1993, CTR1, a Negative Regulator of the Ethylene Response Pathway in Arabidopsis, Encodes a Member of the Raf Family of Protein Kinases	
		NATIONAL CENTER FOR BIOTECHNOLOGY INFORMATION GENERAL IDENTIFIER NO. 3135250, 05-16-1998, S. D. ROUNSLEY ET AL., Arabidopsis thaliana chromosome II BAC F27F23 genomic sequence	
		MARIA ANDERSSON ET AL., J. Lipid Res., vol. 35:535-545, 1994, Purification of diacylglycerol:acyltransferase from rat liver to near homogeneity	
		BEVERLY HAY AND JAY M. SHORT, Strategies, VOL. 5:16-18, 1992, ExAssist™ Helper Phage and SOLR™ Cells for Lambda ZAP(R) II Excisions	

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Group Art Unit	Unknown
Examiner Name	Unknown
Attorney Docket Number	BB1295 USCNT

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS

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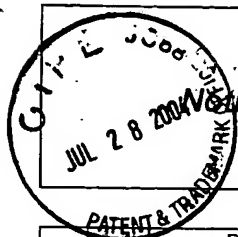
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**Notice of References Cited**

Application/Control No.

09/856,018

Applicant(s)/Patent Under

Reexamination
CAHOON ET AL.

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Elizabeth F. McElwain

Art Unit

1638

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NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	De-Luca, V. AgBiotech News and Information 5 (6): 225N-229N, 1993
	V	Van de Loo et al, PNAS USA 92: 6743-6747, July 1995
	W	Broun et al, Science 282: 131-133, 13 November 1998
	X	Doerks et al, TIG 14 (6): 248-250, June 1998

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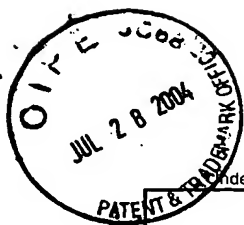
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*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	Smith et al, Nature Biotechnology 15: 1222-1223, November 1997
	V	Brenner, S. E., TIG 15 (4): 132-133, April 1999
	W	Bork et al, TIG 12 (10): 425-427, October 1996
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